

HT98-024/025

CONTINUOUS FREE LAYER SPIN VALVE SENSOR WITH
PATTERNED EXCHANGE UNDERLAYER STABILIZATION

ABSTRACT OF THE DISCLOSURE

5 A spin valve device comprises a free layer, a spacer layer, a
pinned layer, an antiferromagnetic layer, and a patterned underlayer
that includes a magnetic material for providing trackwidth and
longitudinal bias. The patterned underlayer can comprise a buffer
layer, an antiferromagnetic layer and a ferromagnetic layer.
Alternatively, the patterned underlayer can comprises a buffer layer, a
10 chromium layer and a hard biasing, permanent magnetic layer which
provides trackwidth and longitudinal bias. A lower conductor can be
located on the underlayer.